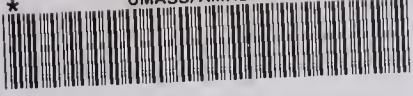


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MASSACHUSETTS
TECHNOLOGY
DEVELOPMENT
CORPORATION
ANNUAL REPORT 1983





BOARD OF DIRECTORS

Howard N. Smith
Chairman of the Board
President, Kurzweil
Computer Products, Inc.

Orie L. Dudley, Jr.
Chairman, Finance Committee
President
The Omega Fund
Endowment Management &
Research Corporation

Dr. John R. Ehrenfeld
Senior Consultant
Arthur D. Little, Inc.

Joseph S. Iandiorio, Esquire
Chairman, Policy Committee
Patent Counsel

Honorable Frank T. Keefe
Secretary of Administration
and Finance

Honorable John F. Kerry
Lieutenant Governor

Honorable Evelyn F. Murphy
Secretary of Economic Affairs

Dr. Judith H. Obermayer
President
Obermayer Associates

Dr. Robert C. Seamans, Jr.
Henry R. Luce Professor
of Public Policy and
Dean of Engineering, Emeritus
Massachusetts Institute
of Technology

Arthur M. Vash
Chairman, Investment
Advisory Committee
Corporate Director

OFFICERS AND STAFF

William F. Aikman
President

Orie L. Dudley, Jr.
Secretary and Treasurer

James R. Ayers
Comptroller

Paul J. Ballantine
Senior Investment Analyst

Robert J. Crowley
Manager/Portfolio
Development

Robert J. Lepkowski
Investment Analyst

Gail M. Cormier
Supervisor/Management
Information Services

Esther E. Larson
Supervisor/Administrative
Services

Marie B. Phaneuf
Public Information Officer

Legal Counsel
Palmer & Dodge
Boston, Massachusetts

Auditors
Deloitte Haskins & Sells
Boston, Massachusetts

Bankers
Shawmut Bank of Boston, N.A.
Boston, Massachusetts

On the cover:
Pacer Systems' *Omni*
Directional Air Data System
being readied for testing in
the company's wind tunnel

Above: Seated from left:
Obermayer, Aikman, Smith, Vash
Standing from left:
Dudley, Rudman*, Ehrenfeld, Iandiorio, Gomes**

*Representing Sec. Keefe
**Representing Lt. Gov. Kerry

THE PURPOSE OF MTDC

GOVERNMENT DOCUMENT
COLLECTION
JUL 1 1984
University of Massachusetts
Depository Copy

The Massachusetts Technology Development Corporation is an independent public agency which provides venture capital financing to early-stage, high-risk technology-based companies.

The purpose of MTDC is to provide a source of capital to new and expanding technological enterprises which have the potential to generate significant employment growth and other public benefits but which have been unable to secure from conventional sources sufficient capital to fund such expansion.

MTDC was chartered by act of the state legislature in late 1978 and began operating its first investment fund in March 1979. The capitalization of MTDC's investment funds is provided in part by the Commonwealth of Massachusetts, in part by the U.S. Department of Commerce, and in part by earnings on the investments in the portfolio.

The investment operations and other activities of MTDC are supervised by an eleven person Board of Directors which includes three senior public officials. The organization is a public instrumentality and is believed to be the first publicly-financed venture capital organization in the nation.



REPORT OF THE CHAIRMAN AND PRESIDENT

This past year represented the fourth full year of MTDC's operation as the nation's first venture capital organization financed wholly with public funds. The extremely productive year came to a satisfying end on June 30, 1983 with the addition, in the final hours of the fiscal year, of the twenty-fourth company to join the MTDC portfolio.

During the year, we continued the focus on start-up companies which we announced the preceding year, adding seven such enterprises to our portfolio. Simultaneously, we concentrated our efforts on implementing our strategies for building more diversity into the portfolio.

The diversification strategy was advanced by the addition of companies operating in important new industries not previously represented in the portfolio, such as fiber optics, laser technology and telecommunications. In addition, we added several very sophisticated computer software companies, thereby augmenting the already strong presence we had in computer hardware. We also began a new concentration on the medical instrument industry with the financing of a start-up company which markets an exciting family of diagnostic instruments.

We had continued success with our efforts to finance companies located in areas of the state which will benefit most from the new employment created by their growth. We were very pleased to be able to play a lead role in the financing of new companies located in areas such as the South End and Brighton sections of Boston, the center of downtown Chicopee, and the small central Massachusetts town of Southbridge.



William F. Aikman, President, and Howard N. Smith, Chairman

Over the course of the past four years of investment activities, MTDC has been a leading participant in more than \$37,000,000 of venture financing for highly innovative young companies. At year's end, MTDC had invested \$4,110,000 in the companies in the portfolio. These investments by MTDC leveraged a total of \$33,084,000 in investments by conventional private sector sources in the same companies.

In many cases, MTDC acted as the lead institutional investor for a company and issued its commitment of financing to the company prior to that of the private sector investors. Aggregating the financings, most of them syndicated, of all the companies in the portfolio on June 30, every dollar of MTDC investment leveraged \$6.14 of new private sector investment. In most cases, this very significant private investment was made in companies which had little or no success in securing capital before MTDC issued its commitment.

As has been true each of the past three years, the demand for MTDC's financial programs increased dramatically during the year. By the fourth quarter, we were receiving a new qualified application for financing every single business day. Many of these companies we were able to assist through our Management Assistance and Financial Packaging Programs. Although each of those programs had to be scaled back somewhat from activity levels of the previous year, they were still able to address the needs of more than 100 companies during the year.

From the beginning, MTDC has trained the focus of each of its programs on the task of enabling new and emerging companies to grow in ways that will contribute to the future economic well-being of the state. One of the major measures of how companies make that contribution is the new employment they generate. In the aggregate, our portfolio companies estimate they will create directly more than 2600 new jobs. The number of additional jobs created in Massachusetts indirectly as a result of portfolio companies' growth is estimated to be approximately 3800.

Our portfolio companies produce a range of other benefits for the Commonwealth beyond employment generation and beyond the hundreds of thousands of dollars of tax revenues they produce. Several of them operate programs which result in the hiring of people who were formerly on public assistance programs, several have located in previously long vacant buildings in the downtown areas of our older cities, and several have made fundamental discoveries in their technologies, thereby increasing the likelihood that as their industry develops it will develop in Massachusetts.

Following the close of the fiscal year, Dr. Marvin G. Schorr retired as Chairman of the Board. Dr. Schorr had served as Chairman since the day MTDC was founded and had carefully guided the corporation through its early development. His contributions to the success of the organization were enormous and both the Board and staff will miss his wise counsel.

As the pace of technological innovation in the Massachusetts entrepreneurial community continues to quicken, MTDC is expecting 1984 to be its busiest year yet. With the continued assistance of a very supportive Administration, an extremely distinguished Board of Directors, and a highly professional and dedicated staff, we expect the year ahead to be not only our busiest to date but also our best.

October 1, 1983



Howard N. Smith
Chairman



William F. Aikman
President



1983 INVESTMENTS

BUSINESS RESEARCH CORPORATION

■ Ready reference to technical data is critical to U.S. businesses engaged in corporate planning, market research and financial analysis. Business Research Corporation's innovative databases deliver to the subscriber's computer terminal full-text (every word) research reports on companies and industries worldwide.

In the dramatically growing multi-billion dollar information retrieval market, BRC's full-text databases can bring to their users more information more quickly than any other existing business information product.

Founded in 1982, this Brighton-based company was given first impetus by MTDC's early commitment of \$210,000 which attracted private financing of \$1,250,000.

LASER ENGINEERING, INC.

■ Light Amplification by Stimulated Emission Radiation is a wordy way of saying "LASER," a device which produces a high-intensity beam of light.

Laser Engineering, Inc. of Waltham is the world's sole producer of sealed-off carbon dioxide (CO₂) lasers exceeding 40 watts. The demand for such large lasers is growing rapidly.

Because the sealed-off CO₂ laser is compact and quiet, it lends itself to a variety of applications and is the preferred choice of medical, military and industrial markets.

Impressed with these diverse markets and with the company's proprietary technology, MTDC invested \$125,000 in Laser Engineering to complete an international financing package.



■ An LEI technician puts finishing touches on a sealed-off carbon dioxide laser



■ Users of Computer Solutions' *FM-3000* at one of the company's training seminars

COMPUTER SOLUTIONS, INC.

■ Fast-growing high-tech manufacturing firms need sensitive, accurate methods for improving production, managing cash flow and minimizing inventory.

Computer Solutions, Inc. of Burlington provides these vital services and more with its *FM/3000*, a fully-integrated software system offering complete accounting and management information to the high-technology manufacturer.

Recognizing the substantial market for and the superior quality of the *FM/3000*, MTDC invested \$150,000 in CSI which resulted in a capital infusion of \$750,000 from three well-known private venture capital firms.

FOTEC, INC.

■ Since fiber optic technology is now the medium of choice in telecommunications, a burgeoning market exists for low-cost instruments to test fiber optic components and systems. Fiber optic systems transmit power in the form of light which is invisible to the human eye.

Fotec, Inc., with its manufacturing facilities located in Boston's South End, markets a line of reliable, easy-to-use instruments for testing all types of fiber optic communication systems. Fotec's unique technology uses highly photosensitive detectors and advanced circuitry to convert the light signal into an electrical current readable by a digital multimeter.

MTDC's investment of \$175,000 in Fotec leveraged enough additional private capital to enable the company to enhance its growing position in the marketplace.

■ Founders and employees work side-by-side to design and build Fotec's products





PRACTEK ASSOCIATES, INC.

■ Founded in 1975, PracTek Associates, Inc. of Chicopee designs and manufactures Local Area Network Systems which interface telephone equipment, televisions, microprocessors and other terminal hardware using proprietary network circuitry.

Initially targeted toward educational markets, PracTek offers institutions a unique communication system which integrates eleven administrative and fifteen educational functions. The system provides teachers multiple visual resources to foster the learning process while permitting administrators to maintain centralized control.

An investment by MTDC of \$200,000 was instrumental in securing for PracTek an additional \$450,000 from a combination of private and public financial sources.

DEWEESE ASSOCIATES, INC.

■ Corporate staffs are growing, and Deweese Associates, Inc. of Bedford is making easier the task of internal directory assistance operators who must quickly locate members of large staffs.

The first telecommunications firm in MTDC's portfolio, Deweese manufactures *Telphi*™, a Directory Assistance System which is a microcomputer-based information retrieval and display package. The system affords switchboard operators complete, currently accurate directory information and rapid access to that information.

MTDC's \$250,000 investment led to an additional \$1,300,000 in financing for this start-up company, with 85% of that amount coming from two leading private venture capital firms.



■ Constant engineering checks assure the quality and performance of Deweese's *Telphi* Directory Assistance System

RANDWAL INSTRUMENT COMPANY, INC.

■ For the past four years, Randwal Instrument Company has dedicated intense research efforts to solving fundamental problems concerning human vision. The successful result of these efforts is a family of unique ophthalmic instruments.

With an investment of \$175,000, MTDC provided the financial muscle to enable this young Southbridge company to begin marketing of these important instruments. A private Rhode Island venture capital firm, with an investment of \$250,000, has joined MTDC in making the introduction of these diagnostic breakthroughs possible.

The first in Randwal's family of products, a variable contrast acuiometer, is used for early detection of glaucoma, cataract, edema and diabetes, as well as for measuring retinal acuity.

■ Randwal's white light acuiometer



PREVIOUS INVESTMENTS

IKIER TECHNOLOGY, INC.

■ Ikier Technology manufactures and markets high-performance raster graphic subsystems which are used by OEMs to integrate advanced engineering workstations, CAD systems and special-purpose display systems. These subsystems are sold by the company into a market estimated to be \$30,000,000 in 1984, and they represent the stepping stones for forward integration to larger systems. The product evolution to larger systems will present the company with a significantly larger, explosively growing market. MTDC's \$150,000 in start-up capital enabled Ikier to raise an additional \$980,000 in private funds.



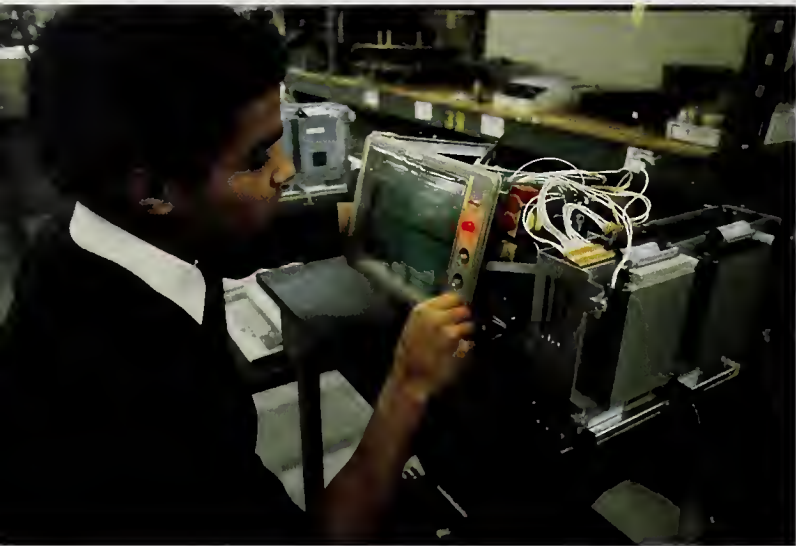
■ Technician inspecting a component of Ikier's raster-graphic subsystem

SPIRE CORPORATION

■ Spire, which was the first entry in MTDC's portfolio, fabricates manufacturing equipment for the photovoltaic energy industry and performs contract-supported materials research, process development and equipment engineering in photovoltaics. The company also performs contract services for the semiconductor and metal surface modifications industries. The firm's solar module production equipment is beginning to achieve significant market growth, and the company expects this product line to generate substantial revenues over the next five years.

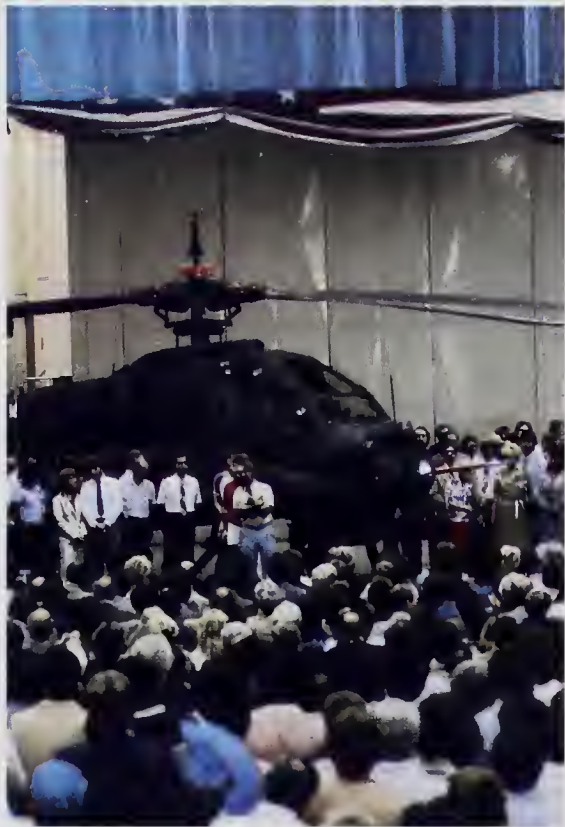
■ A Spire laboratory assistant prepares a performance test of a photovoltaic modular unit





■ DISCOM employee monitoring performance of the magnetic deflection yoke

■ Pacer Systems' OADS sits atop the U.S. Army's newest attack helicopter – the AH-64 Apache



DISPLAY COMPONENTS, INC.

■ DISCOM designs, manufactures and markets precision magnetic electron optical components. Its principal product is a line of high-resolution magnetic deflection yokes which are used as a component of cathode ray tubes by a number of manufacturers in a variety of markets. The company's magnetic deflection yoke is the component which is used to deflect an electron beam onto the screen of a cathode ray tube. Employment growth and production economies have each advanced steadily since the firm moved to large new quarters in Westford.

PACER SYSTEMS, INC.

■ Pacer Systems, Inc., Burlington, has been awarded two multi-million dollar contracts from the U.S. Army and Coast Guard to provide its *Omni-directional Air Data System* to the production of two of the most advanced helicopters in the world, the AH-64 Apache and HH-65A Dolphin. Pacer's unique *OADS* measures airspeed and other air data parameters in all directions and at all speeds between zero and 250 knots. The company now employs 300 people and provides a range of products and services to support airborne, shipborne and space systems.

ASPEN TECHNOLOGY, INC.

■ AspenTech of Cambridge was formed to commercialize a large computer program, *ASPEN PLUS*, for steady-state simulation and economic evaluation of process plants. Since MTDC's investment of \$150,000 in 1982, the company has progressed steadily, doubling its staff and expanding into the European market and into China. The *ASPEN PLUS* process simulator has been adopted by twenty-five leading chemical and petrochemical companies and is now considered by the industry to be one of the world's most powerful and flexible process simulators.

SKY COMPUTERS, INC.

■ In 1982 MTDC invested \$250,000 in SKY Computers, Inc. Combined with private investments, MTDC's capital was instrumental in helping SKY launch a new product line, double in size, and triple its sales . . . all within the past year. With the production of its *Fast Floating Point Processor (SKYFPP)*, SKY augmented its initial product, the *SKY Micro Number Kruncher (SKYMNK)*. Both products have been installed in a variety of microcomputer systems to speed up processing for numerically intensive applications such as signal processing, nuclear magnetic resonance (NMR), graphics, seismic analysis and CAD/CAM. SKY has over 400 domestic customers. To accommodate its rapid staff build-up, SKY is renovating additional space within the 19th century Boott Mills complex in Lowell.



■ SKY's employees developing state-of-the-art technology in their 19th century headquarters building

XYLOGICS, INC.

■ Xylogics designs, manufactures and markets intelligent controllers for computer data storage peripherals. The company is a leading supplier of high-quality, high-performance controllers for magnetic tapes and disk drives. After an unsuccessful diversification into subsystem and systems products, the corporation has refocused its strategy on the exciting opportunities in the peripheral controller market. With the completion of a new product line and organizational changes made in early 1983, the firm has resumed rapid growth.

■ A section of Xylogics' intelligent controller undergoing one of many critical quality checks



PUBLISHING TECHNOLOGY CORPORATION

■ Publishing Technology Corporation, recipient of seed capital from MTDC in the spring of 1982, markets its own proprietary software package designed especially for the publishing industry. PTC's software, developed to facilitate the job of circulation fulfillment and other publishing-related tasks, is implemented on all microprocessor-based computer systems using the *Unix*™ operating system. Publishing Technology's progress was advanced in the early part of this year by the infusion of new private capital of \$200,000.



■ An engineer designs with the CGX 2030 Color-Raster Display Station

CGX CORPORATION

■ CGX recently secured \$5,250,000 of second-round equity financing from a national venture capital syndicate. This financing brings to almost \$7,000,000 the total private capital raised by this start-up company since MTDC's investment last year. The funds are being used for volume production of the company's products, including the *2030 Color-Raster Display Station*, at new corporate headquarters and manufacturing facilities in Acton. The system is the first to let users intermix color raster and monochrome vector terminals on a single coaxial cable from a host-based CGX channel unit. The display is believed to be the fastest commercially available color raster CAD/CAM terminal.

VITRONICS CORPORATION

■ Vitronics Corporation of Newburyport, designer and manufacturer of infra-red thermal processing systems for the microelectronics industry, has relocated to new, larger facilities and plans further expansion in 1984. Since MTDC's \$100,000 investment in the company, Vitronics has increased its sales by more than 300%, doubled its workforce and become a recognized leader in its field. Most recently, Vitronics has pioneered the development of an infra-red system which addresses the surface mount attachment technology sweeping the industry.

■ Vitronics workers manufacturing the infrared conveyorized Solder Reflow System



PROCONICS INTERNATIONAL, INC.

■ Proconics International, manufacturer of an automatic *Silicon Wafer Transfer System* used in the manufacture of semiconductor devices, is now gearing up for full production. Capital of \$150,000 from MTDC and \$340,000 of co-invested private funds made possible complete prototype development and testing of the product in the marketplace. Customer response has been extremely positive, and the Woburn company recently received a major order for fifty units from a leader in the semiconductor industry. At year's end, Proconics was near completion of a very significant new private equity financing to underwrite continuing expansion.

CRYSTAL SYSTEMS, INC.

■ By continuing development efforts during the protracted start-up stage of the photovoltaic (PV) industry, Crystal Systems has achieved cost reductions and product improvements which recently allowed it to announce a 37% decrease in the price of its *Heat Exchanger Method (HEMTM)* silicon bars. This reduction, coupled with the high efficiency of its square large-grain multicrystalline material, has generated substantial orders from several producers of high-performance PV modules and marks the beginning of renewed vitality in the solar field.

ICON CORPORATION

■ The depressed environment that has existed in the capital goods sector of the domestic economy weighed heavily on Icon Corporation throughout the past year. After a series of meetings with its investment partners, the Icon Board of Directors made a number of major operational changes to improve the company's prospects. With these changes behind it, the company is now at work developing new markets that will better utilize its line of sophisticated digital electronic devices.

INTERLEAF, INC.

■ Interleaf has announced its first product, the *Office Publishing System-2000*. Two years in development, this system is a breakthrough in office printing. The *OPS-2000* allows a user to compose, edit and print documents containing text, multiple type fonts and graphics. As it begins its first year of sales, Interleaf has expanded its employee base and leased new facilities in Cambridge. At year's end, the company was in the final stages of negotiating a new \$2,000,000 round of equity financing from a consortium of venture capital firms led by First Capital Corporation of Chicago and Hambrecht & Quist of San Francisco.



■ Crystal Systems technicians conducting quality control tests

■ A new customer discovers the many applications of the Interleaf OPS-2000



THE MTDC PORTFOLIO
at June 30, 1983

<u>COMPANY</u>	<u>LOCATION</u>	<u>INDUSTRY</u>	<u>MTDC ORIGINAL INVESTMENT</u>	<u>APPROVAL DATE</u>
ASPEN TECHNOLOGY, INC.	Cambridge	Process Simulation	\$150,000	11/5/81
BUSINESS RESEARCH CORP.	Boston	Computer Software	210,000	6/29/83
CGX CORPORATION	Acton	Computer Hardware	250,000	6/21/82
COMPUTER SOLUTIONS, INC.	Burlington	Computer Software	150,000	3/9/83
CRYSTAL SYSTEMS, INC.	Salem	Materials Science	250,000	6/18/81
DEWEESE ASSOCIATES, INC.	Bedford	Telecommunications	250,000	3/9/83
DISPLAY COMPONENTS, INC.	Westford	Computer Hardware	250,000	12/4/79
FOTEC, INC.	Boston	Fiber Optics	175,000	4/20/83
ICON CORPORATION	Cambridge	Automation: Factory	150,000	11/18/80
IKIER TECHNOLOGY, INC.	Watertown	Computer Hardware	150,000	11/5/81
INTERLEAF, INC.	Cambridge	Automation: Office	200,000	6/21/82
LASER ENGINEERING, INC.	Waltham	Laser Technology	125,000	1/26/83
PACER SYSTEMS, INC.	Burlington	Avionics	200,000	3/19/81
PRACTEK ASSOCIATES, INC.	Chicopee	Educational Communications	200,000	11/3/82
PROCONICS INTERNATIONAL, INC.	Woburn	Robotics	150,000	3/9/82
PUBLISHING TECHNOLOGY CORP.	Needham	Automation: Publishing	25,000	4/20/82
RANDWAL INSTRUMENT CO., INC.	Southbridge	Medical Instruments	175,000	9/21/82
SKY COMPUTERS, INC.	Lowell	Computer Peripherals	250,000	4/20/82
SOLENERGY CORPORATION*	Woburn	Alternative Energy	100,000	12/4/79
SPIRE CORPORATION	Bedford	Alternative Energy	250,000	11/6/79
VITRONICS CORPORATION	Newburyport	Infra-Red Technology	100,000	1/26/83
XYLOGICS, INC.	Burlington	Computer Hardware	250,000	3/4/80

AUDITORS' OPINION

Massachusetts Technology Development Corporation:

We have examined the balance sheets of Massachusetts Technology Development Corporation as of June 30, 1983 and 1982 and the related statements of revenues, expenditures, and changes in fund balances for the years then ended. Our examinations were made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the accompanying financial statements present fairly the financial position of the Corporation at June 30, 1983 and 1982 and its revenues, expenditures, and changes in fund balances for the years then ended, in conformity with generally accepted accounting principles applied on a consistent basis.

Deloitte Haskins & Sells

July 15, 1983
Boston, Massachusetts

FINANCIAL STATEMENTS

BALANCE SHEETS, JUNE 30, 1983 AND 1982

<u>ASSETS</u>	<u>NOTES</u>	<u>1983</u>	<u>1982</u>
GENERAL SUPPORT:			
Cash and cash equivalents		\$ 112,037	\$ 157,871
Interest receivable		44,597	17,347
Prepaid expenses and deposits		11,435	6,106
Leasehold improvements and office equipment – at cost less accumulated depreciation and amortization of \$13,282 in 1983 and \$4,462 in 1982	2	51,278	31,695
Restricted cash and cash equivalents	5	<u>266,000</u>	<u>93,000</u>
Total general support		<u>485,347</u>	<u>306,019</u>
RESTRICTED FOR INVESTMENT PROGRAMS:			
Cash and cash equivalents	2,3	1,423,308	1,148,557
Unexpended grants – letters of credit		352,000	1,122,000
Grants receivable	3	800,000	750,000
Investments	2,3	<u>2,884,471</u>	<u>1,701,443</u>
Total restricted		<u>5,459,779</u>	<u>4,722,000</u>
TOTAL ASSETS		<u>\$5,945,126</u>	<u>\$5,028,019</u>
<u>LIABILITIES AND FUND BALANCES</u>			
GENERAL SUPPORT:			
Accrued liabilities		\$ 49,117	\$ 14,172
Capitalized lease payable		507	1,901
Fund balance		<u>435,723</u>	<u>289,946</u>
Total general support		<u>485,347</u>	<u>306,019</u>
RESTRICTED FOR INVESTMENT PROGRAMS –			
Fund balances	3	<u>5,459,779</u>	<u>4,722,000</u>
TOTAL LIABILITIES AND FUND BALANCES		<u>\$5,945,126</u>	<u>\$5,028,019</u>

See notes to financial statements

STATEMENTS OF REVENUES, EXPENDITURES,
AND CHANGES IN FUND BALANCES
FOR THE YEARS ENDED JUNE 30, 1983 and 1982

	NOTES	1983		1982	
		GENERAL SUPPORT	RESTRICTED FUNDS	GENERAL SUPPORT	RESTRICTED FUNDS
REVENUES:					
Appropriation – Commonwealth of Massachusetts		\$175,000		\$190,000	
Grants – Commonwealth of Massachusetts	3		\$ 800,000		\$ 750,000
Gain on equity investment	2			15,000	
Interest earned	2	395,461		325,053	
Miscellaneous		4,406		1,338	
Total revenues		<u>574,867</u>	<u>800,000</u>	<u>531,391</u>	<u>750,000</u>
EXPENDITURES –					
General support	4	<u>429,090</u>		<u>323,655</u>	
REALIZED LOSS ON INVESTMENT			<u>62,221</u>		
EXCESS OF REVENUES OVER EXPENDITURES		145,777	737,779	207,736	750,000
FUND BALANCES, BEGINNING OF YEAR		<u>289,946</u>	<u>4,722,000</u>	<u>82,210</u>	<u>3,972,000</u>
FUND BALANCES, END OF YEAR		<u>\$435,723</u>	<u>\$5,459,779</u>	<u>\$289,946</u>	<u>\$4,722,000</u>

See notes to financial statements

NOTES TO FINANCIAL STATEMENTS

1. ORGANIZATION AND OPERATIONS

Massachusetts Technology Development Corporation was created as a body politic and instrumentality of the Commonwealth of Massachusetts on October 19, 1978 pursuant to Chapter 497 of the Acts of 1978. The purpose of the Corporation is to provide financial and other assistance to innovative enterprises in Massachusetts that have the potential to expand and generate new jobs and tax revenues. The Corporation is governed by a Board of Directors consisting of eleven members, eight of whom are appointed by the Governor from the private sector and three of whom are public officials.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Amortization and Depreciation

Leasehold improvements are stated at cost and are being amortized on a straight-line basis over five years. Office equipment is stated at cost and is being depreciated on a straight-line basis over estimated useful lives ranging from three to ten years.

Investments

Investments, which at June 30, 1983 and 1982 consisted of notes receivable and investments in capital stock (Note 3), are recorded at cost. Interest earned is credited to the Corporation's General Support Funds. Gains on investments are credited to the Corporation's General Support Funds and losses are charged against Restricted Fund Balances. Repayments of principal and proceeds from the sale of equity investments (to the extent of the cost basis) remain in restricted funds for investment programs. During 1983 the Corporation charged \$62,221 against its restricted funds as a loss on investment.

Income Taxes

The Corporation, as an instrumentality of the Commonwealth, is not required to pay any federal or state income taxes.

3. INVESTMENT PROGRAMS

Sources of Funds

The Corporation's original investment funds were provided in 1979 by a \$2,000,000 grant (including \$28,000 in start-up costs) from the Economic Development Administration (EDA), U.S. Department of Commerce. Under this grant, the Corporation makes loans from a Revolving Loan Fund to eligible borrowers, defined as Massachusetts-based businesses with operations involving a significant amount of technology, which are located in EDA Title IV redevelopment areas and which meet the requirements of the Corporation's enabling act.

During the year ended June 30, 1981, the Corporation was awarded a \$1,000,000 grant under the Corporations for Innovation Development (CID) program of the U.S. Department of Commerce. The grant award is for the purpose of establishing another Revolving Loan Fund to assist in the creation and development of small, innovative high-technology companies in Massachusetts. In addition, the Commonwealth of Massachusetts appropriated \$1,000,000 to the Corporation as matching funds for the federal grant. The Commonwealth appropriation is restricted to a revolving equity investment fund.

During the years ended June 30, 1983 and 1982, the

Commonwealth of Massachusetts appropriated an additional \$800,000 and \$750,000, respectively, to augment the Corporation's investment fund.

Investments

During the years ended June 30, 1983 and 1982, the Corporation made loans and equity investments in aggregate amounts of \$1,600,000 and \$575,000, respectively. Investments in the capital stock of some companies include certain put and call provisions. The terms of each note include an equity participation feature such as warrants to purchase common stock or royalties on gross sales or on net profits as well as interest due monthly at rates varying from 10% to 16% per year. Repayment of principal is generally due in monthly instalments ranging from thirty-three months to sixty months commencing nine months to twenty-four months from the date of the loan. However, such principal payments are subordinated to the payment of certain senior debt of the borrowers.

A summary of investment activity for the year ended June 30, 1983 is as follows:

	NOTES RECEIVABLE	EQUITY INVESTMENTS	TOTAL
Investments made:			
1980 and 1981	\$1,300,000	\$ -0-	\$1,300,000
1982	450,000	125,000	575,000
1983	870,000	730,000	1,600,000
Total investments . . .	2,620,000	855,000	3,475,000
Less repayment on notes receivable . . .	528,308		528,308
Loss on investment - 1983	(62,221)		(62,221)
INVESTMENT BALANCE, JUNE 30, 1983	<u>\$2,029,471</u>	<u>\$855,000</u>	<u>\$2,884,471</u>

As of June 30, 1983 and 1982, the Corporation's Board of Directors had voted approval of additional loans and capital investments in eligible companies in aggregate amounts of \$835,000 and \$625,000, respectively.

4. GENERAL SUPPORT EXPENDITURES

The Corporation's General Support Expenditures for the years ended June 30, 1983 and 1982 were as follows:

	1983	1982
Personnel costs	\$284,562	\$214,243
Professional expenses	22,442	26,766
Occupancy costs	52,119	33,728
Office services and supplies	28,976	23,429
Travel, meetings and conferences	16,682	12,559
Publications and advertising	22,502	11,371
Miscellaneous	1,807	1,559
Total expenditures	<u>\$429,090</u>	<u>\$323,655</u>

5. RESTRICTED CASH — GENERAL SUPPORT

During the years ended June 30, 1983 and 1982, the Board of Directors voted to restrict a total of \$266,000 and \$93,000, respectively, of General Support funds for certain investment related activities.

6. OFFICE FACILITY LEASE

The Corporation has a lease commitment for office space during the next two fiscal years approximating \$49,500 per year (net of sub-lease) with a two-year renewal option. Rental expense for the years ended June 30, 1983 and 1982 aggregated \$42,400 and \$28,000, respectively.



■ With a SPI-SUN
SIMULATOR 240 in the
background, a Spire technician
tests a solar module unit



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